| — - | <br>Clair |  |
|-----|-----------|--|
|     |           |  |

| Application/C | ontrol No. |
|---------------|------------|
|---------------|------------|

10/811,202

Examiner

Jaison P. Thomas

Applicant(s)/Patent under Reexamination

COLLIER ET AL.

Art Unit

1751

| - | 1 | Rejected |
|---|---|----------|
|   | 1 | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| _ | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

|          |          |         |          |              |              |              | '        |                |          |          |              |          |          |                 |          |          |          | '   |          |          |          |          |   |       | '          |          |          |                 |          |           |              |
|----------|----------|---------|----------|--------------|--------------|--------------|----------|----------------|----------|----------|--------------|----------|----------|-----------------|----------|----------|----------|-----|----------|----------|----------|----------|---|-------|------------|----------|----------|-----------------|----------|-----------|--------------|
| Cla      | aim      |         |          |              | (            | Date         | •        |                |          |          |              | Cla      | im       |                 |          | •        | 0        | ate | )        |          |          |          |   | Cla   | aim        |          |          |                 | C        | ate       | <del>,</del> |
| Final    | Original | 1/31/07 |          |              |              |              |          |                |          |          |              | Final    | Original |                 |          |          |          |     |          |          |          |          |   | Final | Original   |          |          |                 |          |           |              |
|          | 1        | 1       |          |              |              |              |          |                |          |          |              |          | 51       | 1               |          |          |          |     |          |          |          |          |   |       | 101        |          |          |                 |          | $\Box$    | $\Box$       |
|          | 2        | 1       |          |              |              |              |          |                |          |          |              |          | 52       | 11              |          |          |          |     |          | _        |          | _        | L |       | 102        |          | Ш        | Ш               |          |           | $\perp$      |
|          | 3        | 1       | <u> </u> |              | $\vdash$     |              | _        |                |          |          |              |          | 53       | 1               |          | -        |          |     |          | $\dashv$ | -1       | 4        | ŀ |       | 103        |          | Н        | $\vdash$        | -        |           |              |
| -        | 5        | 1       | H        |              | H            | $\vdash$     | -        |                |          |          | l            |          | 54<br>55 | 7               | -        | -        | $\dashv$ | _   |          | -        |          | $\dashv$ | H |       | 104<br>105 |          | $\vdash$ | $\dashv$        | $\dashv$ | $\dashv$  | +            |
|          | 6.       | 1       | $\vdash$ | $\vdash$     | _            |              | <u> </u> | $\vdash$       |          |          |              | <u> </u> | 56       | 1               |          |          |          | -   |          | $\dashv$ | $\dashv$ | $\dashv$ | H |       | 106        | $\vdash$ | $\vdash$ |                 | -        | ᆉ         | +            |
|          | 7        | Ť       | -        |              | -            |              |          | -              |          |          | l            |          | 57       | 1               |          |          | $\dashv$ |     |          | $\dashv$ | $\dashv$ | $\neg$   | h |       | 107        |          |          | $\Box$          | 一        | 一         | - -          |
|          | 8        | 1       | $\vdash$ |              |              |              | Г        |                |          |          | İ            |          | 58       | =               |          |          | $\neg$   |     |          |          |          | ╗        | Ī |       | 108        |          |          | П               | 一        | $\exists$ | 丁            |
|          | 9        | 1       |          |              |              |              |          |                |          |          | ]            |          | 59       | 1               |          |          |          |     |          |          |          |          |   |       | 109        |          |          |                 |          | $\Box$    | $\Box$       |
|          | 10       | 1       |          |              |              |              |          |                |          |          |              |          | 60       | 1               |          |          |          | _   |          | _        |          | _        | L |       | 110        | _        | Ш        | Ш               |          | _         | $\dashv$     |
|          | 11       | 1       | _        |              |              |              |          |                |          |          |              |          | 61       | 1               |          |          | _        |     |          | _        | -        | 4        | ŀ |       | 111        |          | $\vdash$ | $\vdash$        | -        | $\dashv$  | $\dashv$     |
|          | 12       | 1       | <u> </u> | L.,          | L            | Щ            |          | H              |          |          |              |          | 62<br>63 | =               |          | $\dashv$ |          |     | $\dashv$ | _        | $\vdash$ | $\dashv$ | F |       | 112<br>113 |          | $\vdash$ | $\vdash\vdash$  | $\vdash$ | $\dashv$  | +            |
| -        | 13<br>14 | 1       | $\vdash$ | H            | -            | -            | <u> </u> | ⊢              | $\vdash$ |          | 1            | $\vdash$ | 64       |                 | $\vdash$ | Н        |          | _   | $\dashv$ |          | $\dashv$ | $\dashv$ | - |       | 114        |          | Н        | $\vdash$        | $\dashv$ | $\dashv$  | -            |
|          | 15       | 1       | $\vdash$ | Н            | $\vdash$     | -            | $\vdash$ | $\vdash$       | H        |          | 1            | <u> </u> | 65       |                 | $\vdash$ | $\dashv$ | -        | -   | $\dashv$ |          | $\vdash$ | $\dashv$ |   |       | 115        |          | Н        | $\Box$          | $\neg$   | $\neg$    | $\dashv$     |
|          | 16       | 1       |          |              |              |              |          |                |          |          |              |          | 66       | Г               |          |          | _        | _   |          |          |          | _        | f |       | 116        |          | П        |                 |          | $\neg$    |              |
|          | 17       | 1       |          |              |              |              |          |                |          |          | 1            |          | 67       |                 |          |          |          |     |          |          |          |          |   |       | 117        |          |          |                 |          |           |              |
|          | 18       | 1       |          |              |              |              |          |                |          |          |              |          | 68       |                 |          |          |          |     |          |          |          | $\Box$   |   |       | 118        |          |          |                 |          |           |              |
|          | 19       | 1       |          |              |              |              |          | _              |          |          | ļ            | <u> </u> | 69       |                 |          |          |          |     |          | _        |          | _        | - |       | 119        | _        | Ш        | Ш               | Ш        | $\Box$    | $\dashv$     |
|          | 20       | 1       |          |              | _            |              | _        | <u> </u>       |          |          |              | <u> </u> | 70       | <u> </u>        |          |          | _        |     |          |          | -        |          | - |       | 120        |          |          | $\vdash$        | Н        | $\dashv$  | +            |
|          | 21       | 1       |          | <u> </u>     | <u> </u>     |              | ⊢        | ┢              | _        |          | }            |          | 71<br>72 |                 | $\vdash$ | _        |          | _   |          |          | Н        |          | ŀ |       | 121<br>122 |          | H        | -               | Н        | -         | +            |
| -        | 22       | 1       | $\vdash$ | $\vdash$     | ┝            | _            | ├        | -              | H        |          | ł            | -        | 73       | -               | Н        |          |          | _   | -        | _        |          | $\dashv$ | H |       | 123        |          | Н        | Н               | $\vdash$ | $\dashv$  | _            |
| .        | 24       | 1       | H        | H            | H            |              | ┢        | $\vdash$       | H        |          | 1            | $\vdash$ | 74       | $\vdash$        | H        |          |          |     | -        |          | Н        | -1       | H |       | 124        |          |          | $\sqcap$        |          | $\neg$    |              |
| -        | 25       | o       |          |              | H            | _            |          | H              |          |          | 1            |          | 75       |                 |          |          | _        |     |          | _        |          | ╗        | ı |       | 125        | _        |          | $\Box$          |          |           |              |
|          | 26       | V       |          |              |              |              |          | T              | <b></b>  |          |              |          | 76       |                 |          |          |          |     |          |          |          |          |   |       | 126        |          |          |                 |          |           |              |
|          | 27       | ٧       |          |              |              |              |          |                |          |          | ]            |          | 77       |                 |          |          |          |     |          |          |          |          |   |       | 127        |          |          |                 |          |           |              |
|          | 28       | 1       |          |              |              | Ĺ            |          |                |          |          |              |          | 78       |                 | Ш        |          |          |     | _        |          |          | _        | L |       | 128        |          | <u> </u> | Ш               | Ш        |           | <b>⊢-</b>  - |
|          | 29       | 1       | <u> </u> | _            | _            | _            |          | <u> </u>       |          |          |              | <u></u>  | 79       | ļ               | Ш        |          |          |     |          |          | _        | -        | F |       | 129        | _        |          | $\vdash \vdash$ |          | $\dashv$  |              |
|          | 30       | 1       | <u> </u> |              | <u> </u>     | $\vdash$     |          | -              |          |          | -            | <u> </u> | 80       | ├—              | _        |          |          |     |          |          | Н        | $\dashv$ | ┝ |       | 130<br>131 | -        | -        | $\vdash\vdash$  | Н        | $\dashv$  | +            |
|          | 31<br>32 | 1       |          | -            |              | -            |          | ├              | ├        | _        | 1            |          | 81<br>82 | ⊢               | H        |          |          |     |          |          | H        | $\dashv$ | - |       | 132        | <u> </u> | -        | ├─┤             |          | $\vdash$  | _            |
| -        | 33       | V       | _        |              | -            | $\vdash$     |          | ┢              | -        | _        | $\mathbf{I}$ | -        | 83       | ┢               | $\vdash$ |          |          |     | -        |          | H        | $\dashv$ | ŀ |       | 133        |          | H        |                 | Н        | М         | $\vdash$     |
| -        | 34       | V       | $\vdash$ |              |              | Н            | $\vdash$ | T              | $\vdash$ |          | 1            |          | 84       | H               | H        | H        |          | _   |          | _        | Н        | $\dashv$ | - |       | 134        |          | Г        | М               | П        | $\neg$    |              |
|          | 35       | V       |          |              |              |              | L.       | L              |          |          | ]            |          | 85       |                 |          |          |          |     |          |          |          |          |   |       | 135        |          |          |                 |          |           |              |
|          | 36       | 1       |          |              |              |              |          |                |          |          | ]            |          | 86       |                 |          |          |          |     |          |          |          |          |   |       | 136        |          |          |                 |          |           | $\perp$      |
|          | 37       | 1       | L        | 匚            |              |              |          |                |          | _        |              |          | 87       | $oxed{igspace}$ |          | _        |          |     |          |          | Щ        | _        | 1 |       | 137        |          | <u> </u> | $\sqcup$        | $\vdash$ | Ш         | 1            |
|          | 38       | 1       | <u> </u> | _            | _            | _            | $\vdash$ | 1              | L.       | <u> </u> | -            | <u> </u> | 88       | <del> </del>    | <u> </u> | -        |          |     |          |          | Н        | $\dashv$ | - |       | 138        | <u> </u> | <b>—</b> | $\vdash$        | $\vdash$ | Н         | -            |
| <u> </u> | 39       | =       | _        | -            | <del> </del> | $\vdash$     | $\vdash$ | _              | _        | -        | -            | <u> </u> | 89       | <del> </del>    | $\vdash$ | H        |          |     | H        |          | Н        | $\dashv$ | ŀ |       | 139        | -        | H        | Н               | $\vdash$ | $\vdash$  |              |
| <b> </b> | 40       | 1       | -        | <del> </del> | ├            | -            | -        | <del> </del>   | <u> </u> | -        | 1            |          | 90<br>91 | $\vdash$        | $\vdash$ | -        | -        |     | H        | H        | $\vdash$ | $\dashv$ | ŀ |       | 140        | -        | $\vdash$ | $\vdash$        |          |           | $\vdash$     |
| -        | 42       | 1       | -        |              | ┢            | H            | $\vdash$ |                | H        | $\vdash$ | 1            | -        | 92       | H               | $\vdash$ | -        | Н        |     | H        | -        | $\vdash$ | $\dashv$ | ŀ |       | 142        | ┢        |          | Н               |          |           | $\sqcap$     |
| -        | 43       | =       |          | -            | H            |              | _        | T              |          | -        | 1            |          | 93       |                 |          |          |          | _   | Г        |          |          | $\dashv$ | ı |       | 143        |          |          |                 |          |           | $\Box$       |
|          | 44       | 1       |          |              | <u> </u>     |              |          | $\Gamma$       |          |          | ]            |          | 94       | L               |          |          |          |     |          |          |          |          | Ī |       | 144        |          |          |                 |          |           |              |
|          | 45       | 1       |          |              |              |              |          | 匚              |          |          |              |          | 95       |                 |          |          |          |     |          |          | $\Box$   |          |   |       | 145        | L        | $\Box$   |                 |          | Ц         | Щ            |
|          | 46       | 1       |          |              | L            | L            |          | L              | L        | L_       |              | <u></u>  | 96       | ₽               |          | _        | _        |     |          |          |          | Ш        |   |       | 146        | <u> </u> | ـــ      | Ш               | $\vdash$ | Щ         | ┝╼┼╴         |
| <u> </u> | 47       | √       | <u> </u> | <u> </u>     | <u> </u>     | <u> </u>     | $\vdash$ | $\vdash$       | <u> </u> | <u> </u> | 1            |          | 97       | ├               | <u> </u> |          |          |     | ļ        |          |          | $\dashv$ | - |       | 147        | -        | $\vdash$ | Н               | $\vdash$ | $\vdash$  | -            |
|          | 48       | =       | ├        | <del> </del> | -            | <del> </del> | ⊢        | <del> </del> — |          | _        | $\mathbf{I}$ | -        | 98<br>99 | Ͱ               | $\vdash$ | -        | -        | _   | H        | -        | $\vdash$ | $\dashv$ | } |       | 148<br>149 | -        | ⊢        | ⊢               | $\vdash$ | Н         | $\vdash$     |
|          | 49<br>50 | 1       | ┢        | ├            | <del> </del> | ├            | -        | ╂━             | ├        | -        | ┨            | -        | 100      | $\vdash$        |          | -        | ⊢        | -   |          | $\vdash$ | H        | $\dashv$ | ŀ |       | 150        | -        | $\vdash$ | H               | $\vdash$ | Н         | $\vdash$     |
| L        | 1 20     | <u></u> | Щ.       | L-           | <u> </u>     | Ц.           | Ц.       | Ц.,            | <u> </u> | L        | J            | Щ.       | , .00    | ــــــ          |          |          | Ц.       |     | Щ.       | Ц        |          | ш        | L |       |            | Ц        | Щ.       | ب               |          | لـــا     | <del></del>  |

| Cl   | aim  |          |          |  |  | Date     | <del></del>                                      |  |          |          |
|--|--|----------|----------|--|--|----------|--|--|----------|----------|
|  |  |          |          |  |  |          |  |  |          |          |
| a  | Original   |          |          |  |  |          |  |  |          |          |
| Final  | ġ  |          |          |  |  |          |  |  |          |          |
| _  | ō  |          |          |  |  |          |  |  |          |          |
|  | 101  | _        |          | _  | _  | _        | Н  |  |          |          |
|  | 101  | Н        | _        | $\vdash$   |  |          |  | -  | -        | -        |
|  | 102  |          |          |  | Ш  |          |  |  | _        | _        |
|  | 103  | Ш        |          | $\vdash$   |  |          |  |  |          | _        |
|  | 101<br>102<br>103<br>104   |          |          |  |  | _        |  |  |          |          |
|  | 105<br>106   |          |          | L  | _  |          |  |  |          |          |
|  | 106  |          |          |  | _  |          | _  |  |          |          |
|  | 107  |          |          |  |  |          |  |  |          |          |
|  | 108  |          |          |  |  |          |  |  |          |          |
|  | 108  |          |          |  |  |          |  |  |          |          |
|  | I 110 I  |          |          |  |  |          |  |  |          |          |
|  | 111  |          |          |  |  |          |  |  |          |          |
|  | 112  |          |          |  |  |          |  |  |          |          |
|  | 113  |          |          | П  |  |          |  |  |          | $\sqcap$ |
|  | 114  | П        |          | Г  | П  |          |  |  | -        | Н        |
| <b> </b>   | 115  | Н        |          | Г  | -  |          |  |  |          | $\dashv$ |
|  | 111<br>112<br>113<br>114<br>115<br>116<br>117                      | H        | -        | _  | $\vdash$   | $\vdash$ |  | -  |          | $\vdash$ |
| <b>-</b>   | 117  | -        | -        | <del>                                     </del> | $\vdash$   | $\vdash$ | $\vdash$   | Н  | $\vdash$ | $\vdash$ |
| <del>                                     </del> | 118  | $\vdash$ | _        | <del>                                     </del> | $\vdash$   | $\vdash$ | $\vdash$   | $\vdash$   | $\vdash$ | $\vdash$ |
|  | 110  | ⊢        | -        | -  | ├  | ⊢        | -  | $\vdash$   | Н        | $\dashv$ |
|  | 119<br>120<br>121  | <u> </u> | _        | $\vdash$   | ⊢  | ⊢        | <u> </u>   | ┝  | -        | $\dashv$ |
|  | 120  | L        | _        | <b> </b> _                                       | _  | <u> </u> | H  | $\vdash$   | _        | $\dashv$ |
|  | 121  |          |          | <u> </u>   | _  | <u> </u> |  | $ldsymbol{le}}}}}}}$ |          | _        |
|  | 122  |          |          |  |  |          | L  |  | L.       |          |
|  | 122<br>123<br>124<br>125<br>126<br>127<br>128<br>129<br>130<br>131 |          |          |  |  | L        |  | _  | <u> </u> |          |
|  | 124  | _        |          |  |  | _        |  |  |          |          |
|  | 125  |          |          |  | L  |          |  |  | L_       |          |
|  | 126  |          |          |  |  |          |  | L  |          |          |
|  | 127  |          |          |  |  |          |  |  |          |          |
|  | 128  |          |          |  |  |          |  |  |          |          |
|  | 129  |          |          |  |  |          |  |  |          |          |
|  | 130  |          | -        |  |  |          | Г  | _  |          |          |
|  | 131  | Г        |          |  |  |          |  | ┰  |          | П        |
|  | 132  | -        | _        | 1  | Ė  | T        | $\vdash$   | $\vdash$   |          |          |
|  | 133  | ┢        | $\vdash$ | <del>                                     </del> | -  |          | $\vdash$   | H  | -        | $\vdash$ |
| <b>—</b>   | 133<br>134   | -        | $\vdash$ | $\vdash$   | $\vdash$   | $\vdash$ | <del>                                     </del> |  | $\vdash$ | Н        |
| <del> </del>                                     | 135  | $\vdash$ | -        | <del>                                     </del> | <del>                                     </del> | $\vdash$ | $\vdash$   | <u> </u>   | $\vdash$ | Н        |
| <del></del>                                      | 136  | $\vdash$ |          | ├  | $\vdash$   | $\vdash$ | ┢  | -  | $\vdash$ | Н        |
|  | 136<br>137   | -        |          | $\vdash$   | $\vdash$   | $\vdash$ | <del>                                     </del> | -  | $\vdash$ | Н        |
| $\vdash$   | 120  | -        | ├-       | <del>                                     </del> | $\vdash$   | $\vdash$ | $\vdash$   |  | $\vdash$ | Н        |
|  | 138<br>139   | -        | ├—       | <del> </del> —                                   | $\vdash$   | $\vdash$ | -  |  | $\vdash$ | Н        |
|  | 139  | -        | -        | -  | $\vdash$   | $\vdash$ |  | $\vdash$   | $\vdash$ | $\vdash$ |
|  | 140  | ┞        | ├—       | ⊢  |  | -        | <u> </u>   | -  | ├-       | Н        |
|  | 141  | ├        | <u> </u> | $\vdash$   |  | ├-       | <del> </del>                                     | ⊢  | ├        | Н        |
|  | 142  | L        | <u> </u> | <u> </u>   | <u> </u>   | _        | <u> </u>   | <b> </b> -   | <u> </u> | Щ        |
| <u> </u>   | 143  | <u> </u> | <u> </u> |  | <u> </u>   | <u> </u> | <b>├</b>   | <u> </u>   | _        | Щ        |
| <u> </u>   | 144  | <u> </u> |          |  | <u> </u>   | L        | <u> </u>   | <u>L</u>   |          | Ш        |
|  | 145  | <u> </u> | <u></u>  | <u></u>  |  |          |  |  | <u> </u> | Ш        |
|  | 146  | L        | L        |  | $\Box$   | $\Box$   | L  | _  |          |          |
| [  | 147  |          |          | $\Box$   |  | L        | 匚  |  | L        |          |
|  | 148  | Π        |          |  |  |          |  |  |          |          |
|  | 149  |          | Γ        | Π  |  | П        |  |  | <u> </u> |          |
|  | 150  | Г        | <u> </u> |  | Г  | Г        | $\Box$   | Т  |          | П        |
|  |  |          |          |  | ь.   |          | <u> </u>   |  |          |          |